



Manufacturers of Custom Welding Lines for Resale  
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# SELECTRODE 6005

316L Stainless Steel TIG

## INTERNATIONAL CLASSIFICATIONS

AWS A5.9 ER316L

EN ISO 14343-A: W 19 12 3L

## FEATURES & APPLICATIONS

**CHARACTERISTICS:** The deposit has good resistance to general corrosion and due to its low carbon content, good resistance to intergranular corrosion. Due to the balanced molybdenum content it has good resistance to pitting corrosion.

**APPLICATIONS:** For molybdenum bearing stainless steels with 1.5 to 3.0% Mo.

**MICROSTRUCTURE:** Austenitic matrix with a ferrite content of 11 FN according to the Delong diagram.

## ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

C	Si	Mn	P	S	Cr	Ni	Mo	Cu	Fe
.02	.40	1.8	.02	.01	19	12	2.6	.10	Bal.

## TYPICAL MECHANICAL PROPERTIES

### Undiluted Weld Metal

Tensile Strength

Yield Strength

Elongation

Impact Energy

Hardness

### Maximum Value Up to:

88,000 PSI (607 MPa)

59,000 PSI (407 MPa)

42%

40J:-157 °F (-105°C)

Brinell 209, Rockwell B96

## WELDING CURRENT & INSTRUCTIONS

**Recommended Current:** DC- (Argon or helium gas should be used to minimize burn-off of the tungsten electrode.)

### Recommended Amperage Settings:

Diameter Inches (mm)	Metal Thickness Inches (mm)	Tungsten Size Inches (mm)	Amps	Travel Speed In/Min mm/s	
1/16 (1.6)	1/16 (1.6)	1/16 (1.6)	35-60	12	5.1
3/32 (2.5)	3/32 (2.5)	1/16 (1.6)	45-85	12	5.1
1/8 (3.2)	3/16 (5.0)	3/32 (2.5)	65-130	10	4.2